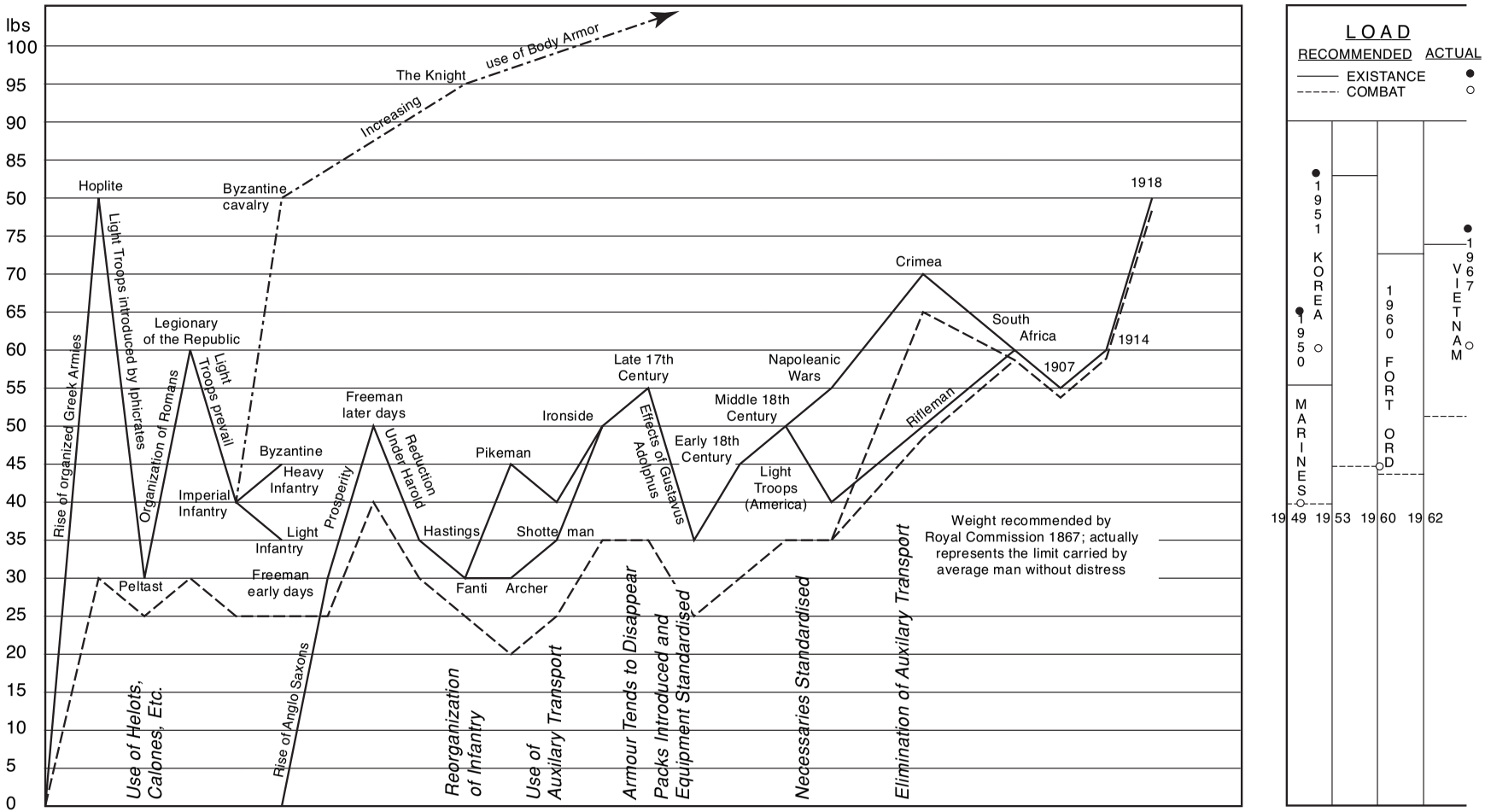

Fig. 1-1. The soldier's load: estimated, recommended, and actual. This chart, presented by N. W. Lothian in 1922, was updated by R. F. Goldman in 1969 to include data for the late 1940s through the Korean War in 1951; the subsequent, noncombat Cold War; and the Vietnam War in 1967. The chart shows that despite recognition of the adverse effects of heavy load carriage on military operations as early as the introduction of the armor of the Greek hoplite,[1] and the recommendation of a British Royal Commission in 1867[2] that 45 lb represented the limit carried by average troops without distress, the cycle of increasing the soldier's load in wartime—until it becomes clear that he is at a severe disadvantage against more lightly loaded opponents—has continued over the last two millenia and seems likely to continue into the third. The *combat* load, close to the 45-lb recommendation in peacetime, and the *existence* load (ie, tentage, sleeping bag, poncho, etc, carried on a march), which hovers around 65 lb in peacetime, both increase dramatically during wartime, to the soldier's detriment.[3] According to the US Army Research Institute of Environmental Medicine, the current nomenclature and recommended weights for soldiers are as follows: fighting load, 41.5 lb; approach load, 67.5 lb; and sustainment load, 97.5 lb.[4] Sources: (1) Xenophon. *Anabasis*. 3.4.48. (2) British Royal Commission. *The Influence of Accoutrements on Health.* Cited by: Lothian NW. The load carried by the soldier. *J Roy Army Med Corps.* 1921;37:241–263, 324–351, 448–458, and 1922;38:9–24. Distributed by: Washington, DC: Office of The Quartermaster General, Research and Development Branch, Textile, Clothing and Footwear Division. Tentage and Equipage Series Report 11. Released for public information by The Office of Technical Services, US Department of Commerce; 1954: 7. (3) Marshall SLA. *The Soldier's Load and the Mobility of a Nation.* Washington, DC: Combat Forces Press; 1950. (4) Pandolf KB. Senior Research Scientist, US Army Research Institute of Environmental Medicine, Natick, Mass. Personal communication, 11 May 2000. Chart: Adapted with permission from Goldman RF. Physiological costs of body armor. *Mil Med.* 1969;134(3):209.